

REMARKS

INTERVIEW WITH EXAMINER DECEMBER 15, 2003

Applicant's attorney thanks the Examiner for the opportunity to meet with the Examiner on December 15, 2003 to discuss the claims, the prior art and suggested language.

CLAIM OBJECTIONS

Claim 6 was objected to for a repeated instance of the word "the." The extra recitation of "the" has been deleted. Thus, claim 6 should no longer be objected to.

CLAIM REJECTIONS UNDER 35 U.S.C. §112

Claims 4 and 6 are rejected under 35 U.S.C. §112, second paragraph.

The term "load" has been inserted into "route measuring unit" so that both claims now read ---route load measuring unit--- in lines 6 and 7 respectively.

Thus, claims 4 and 6 are believed to be allowable under 35 U.S.C. §112, second paragraph.

CLAIM REJECTIONS UNDER 35 U.S.C. §102

Claims 1-3, 7 and 8 are rejected under 35 U.S.C. §102(a) as being anticipated by WO 98/26559 to Joffe et al.

It is respectfully submitted that Joffe relates to a system of assigning a request for a data object from a client to one of multiple network servers, based on a particular routing policy. The policy includes minimizing the amount of time for the request to be completed by, for example, serving the data object to the client according to the shortest available network path (see lines 4 to 8 on page 5). The shortest available network path is selected based on the server status such as the load (the number of currently open TCP connections, free RAM, free SWAP, and CPU idle time) of the server terminal measured by a load manager 366 of the server and on the network path characteristics such as an ICMP echo response time measured by the ping manager 364 of the client (see lines 14 to 16 on page 17, and lines 1 to 18 on page 18).

Claims 1, 4, 6, 7 and 8 have been amended to clarify that both the path load and the operating state are measured, and that effective bandwidth is based on parameters that include at least a round-trip time, a maximum segment size, and an average congestion window size.

It is respectfully submitted that substantially adding the features of claim 3 to claim 1 is appropriate since the storing unit of claim 2 may be inherent in claim 1 since effective bandwidth is generally measured over a time interval.

In contrast, according to the present invention, the destination of the request for service is selected based on the load in the route from the route load measuring unit to the client terminal, the load measured by the route load measuring unit that is in the server terminal or in the vicinity of the server terminal. The load in the route is the effective bandwidth of the route, the effective bandwidth estimated based on a plurality of parameters. More specifically, the parameters include at least a round-trip time, a maximum segment size, and an average congestion window size. The present invention provides great advantages, for example, in an environment in which services are provided to any unspecified multiple users via a network where the systems of the users cannot be changed, because the load in the route can be measured at the server side (or in the vicinity of the server) without having to provide any special means in the user terminals.

Therefore, Joffe fails to disclose that the route load measuring units are provided in the server terminal or in the vicinity of the server terminal, as disclosed by the present application. Further, Joffe fails to disclose measuring anything related to the effective bandwidth of the present invention. That is, according to Joffe, the load manager 365 in the server measures the load in the server terminal instead of the load in the path. Moreover, according to Joffe, the ping manager 364 of the client measures "round trip values" (see line 10 of page 20) which may correspond to one of the parameters determining the effective bandwidth in the present invention, but the ping manager 364 is not in the server terminal not in the vicinity of the server terminal, and the ping manager 364 does not measure the effective bandwidth based on a plurality of parameters as recited in the independent claims 1, 4 and 6.

CLAIM REJECTIONS UNDER 35 U.S.C. §103

Claims 4-6 are rejected under 35 U.S.C. §103(a) as being unpatentable over WO 98/26559 to Joffe et al. in view of Jindal et al. (USPN 6,327,622).

Claim 5 has been cancelled without prejudice or disclaimer. Thus, the rejection of claim 5 is submitted to be moot.

Claims 4 and 6 have been amended to recite that the multiple measuring units determine parameters including at least a round-trip time, a maximum segment size, and an average congestion window size. In addition, claims 4 and 6 have been amended to show more clearly that selection of a server is based on the path load and the operating state, wherein the operating states include idle and active states. It is respectfully submitted that such limitations are not taught or suggested by WO 98/26559 to Joffe et al. and/or Jindal et al. (USPN 6,327,622).

Thus, claims 4 and 6 are respectfully submitted to be allowable under 35 U.S.C. §103(a) and to be patentable over WO 98/26559 to Joffe et al. in view of Jindal et al. (USPN 6,327,622).

CONCLUSION

In accordance with the foregoing, claims 1, 4, 6, 7, and 8 have been amended. Claims 3 and 5 have been cancelled without prejudice or disclaimer. Claims 1-2, 4, and 6-8 are pending and under consideration.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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